




**Interoffice Memorandum**

Date July 10, 2020

TO: Board of County Commissioners

FROM: Mayor Jerry L. Demings 

SUBJ: **Managerial Appointment  
CONSENT AGENDA ITEM JULY 28, 2020**

**Public Works Department**

I am pleased to announce the appointment of Humberto Castellero, P.E., as the new Manager of the Traffic Engineering Division. This position is responsible for overall management of transportation and traffic engineering programs in Orange County as well as responsibility for the field operations of the Traffic Engineering Division. The position also oversees various projects including installing, designing, and maintaining traffic signals, traffic control signs, traffic counts and pavement striping.

Mr. Castellero began his career with Orange County as a Chief Engineer/Orange County Traffic Engineer for the Traffic Engineering Division in March of 2018 and has been the acting manager for the Traffic Engineering Division since December 2019. He brings with him 30 years of previous experience and expertise from his employment within various state and local governments, the Florida Department of Transportation and several engineering firms. This experience includes intelligent transportation systems (ITS), bus rapid transit (BRT), bicycle and pedestrian master planning, FDOT complete streets initiatives, and other transportation safety initiative programs.

Mr. Castellero holds a Masters of Business Administration in Finance & Operations from the Indiana University, Bloomington, IN, a Bachelor of Science in Mechanical Engineering from Clarkson University, Postdam, NY, and holds Professional Engineer registrations in the State of Florida and California, and holds a national certification as a Professional Traffic Operations Engineer (PTOE).

Mr. Castellero's appointment will be effective the first full pay period after Board approval at an annual salary of \$126,006.40. His resume is attached for your review.

Action Requested: **Confirmation of the Mayor's managerial appointment of Humberto Castellero, P.E., as Manager, Traffic Engineering Division, Public Works Department.**

Attachment

- c: Byron W. Brooks, AICP, County Administrator
- Chris Testerman, AICP, Deputy County Administrator
- J. Ricardo Daye, Director, Human Resources Division

# Humberto Castellero, PE, PTOE

5268 Wellington Park Circle, A22, Orlando, FL 32839  
hcastillero@hotmail.com  
904.673.2665

## Background

Humberto is an accomplished professional engineer with 30 years of experience in both private and public sectors in the transportation/traffic industry, having worked on many planning, development, design and construction engineering projects in Florida, California, and Illinois.

Humberto is proficient with the MUTCD, Manual on Uniform Traffic Studies, Traffic Engineering Manual, Speed Zoning Manual, Florida Design Manual, Highway Capacity Manual, Highway Safety Manual, Florida Greenbook, and other publications used in the field of transportation/traffic engineering. His software proficiency includes the use of Microsoft Word, Excel, PowerPoint, MicroStation, GEOPAK, Highway Capacity Software, and Synchro software.

## Expertise

His expertise include roadway project development studies (PD&E, PDR, PDS) and design (new alignments, widening and resurfacing), interchange design/modifications, signal design/coordination, SMART corridors using intelligent transportation systems (ITS), bus rapid transit (BRT) facilities, transit signal priority (TSP), bus route optimization, design/installation transportation management center (TMC), Park-and-Ride facilities, Traffic Impact studies, Bike and Pedestrians Master Plans, FDOT complete streets initiatives (context classification & road diets), FDOT innovative intersection control evaluations (Roundabouts, RCUTS, Contra Flow Intersections, Divergent Diamond Interchanges), lighting design for corridors/intersections, Pedestrian Safe Routes to Schools and Transportation Safety initiatives (WRT, INVEST, FDOT Bike/Ped Safety Coalition).

## Education

- August 1987- May 1989 M.B.A.(Finance & Operations) Indiana University, Bloomington, IN
- August 1981- May 1985 B.S.(Mechanical Engineering) Clarkson University, Potsdam, NY

## Professional Registrations

- Florida Civil Engineer, PE 60541
- Traffic Engineer, PTOE, 1663
- California Civil Engineer, PE 53142
- California Traffic Engineer, TR2157
- Institute of Transportation Engineers, 29941

## Employment History

- March 2018 to Present Chief/OC Traffic Engineer, Orange County, Orlando, FL
- December 2014 to March 2018, State Traffic Studies Engineer, FDOT Central Office, Tallahassee, FL
- June 2005 to December 2014, Transportation Manager, Eisman & Russo, Inc., Jacksonville, FL
- March 2003 to May 2005, Senior Project Manager, England, Thims & Miller, Inc., Jacksonville, FL
- July 2000 to February 2003, Traffic Supervising Engineer, City of Oakland, Oakland, CA
- August 1997 June 2000, Associate Engineer, City of San Leandro, San Leandro, CA
- January – July 1997, Senior Engineer, Brian Kangas Foulk, Inc., Redwood City, CA
- May 1995 to December 1996, Senior Engineer, AECOM, City of Orange, CA
- December 1991 to May 1995, Project Engineer, Caltrans, Los Angeles, CA
- October 1989 to April 1991, Project Engineer, T-Y Lin, Chicago, IL

# Humberto Castillero, PE, PTOE

## Experience

### Orange County (Public Works)

- Directed traffic engineering projects and programs, including signal CIP; pedestrian safety audits and small area studies; creation of SOP(s) for development of work orders and input into the MAXIMO system, MOT permit review and approval; annual safety counts; intersection improvement projects; traffic calming measures (speed humps, raised islands, traffic circles); red light running camera; pedestrian/bicycle safety countermeasures; systemic implementation of signs (regulatory, guide and warning) and new sub-divisions sign installations
- Developed/reviewed signalization, signing and pavement marking, maintenance of traffic plans, specifications and estimates (PS&E) from OC Public Works, OC Parks & Recreation, OC Utilities, FDOT, CFX, LYNX, Metro Plan, CFRC/Sun Rail Quiet Zones, Utility Agencies, City of Orlando and adjacent municipalities within the incorporated Orange County
- Managed and participated in the traffic engineering review of development and engineering design plans, specifications and estimates (PS&E) for Public Works in the Development Engineering, Engineering, Roads & Drainage, Transportation Planning and Highway Construction Divisions. In addition, reviewed/coordinated approval of *shop drawings and maintenance of traffic (MOT) plans*
- Provided leadership and direction for the Traffic Engineering Division administration section, including the reorganization of duties, internal cross training of staff, development of performance measures, customer service guidelines/communication protocols, acquisition of design/construction/maintenance contracts to leverage staff resources
- Assumed leadership role in developing and monitoring operating and CIP budgets for the administrative section, including signal installation, signal structures inspections, traffic calming program, roadway signage program, school zone program and speed monitoring program
- Provided data-driven solutions to traffic engineering issues such as installation of stop and signal control intersections when warranted, installation of speed humps, speed feedback, and school zones as a cost effective measure to improve safety, installation of red light running cameras as a deterrent to run through the red light and installation of multi-modal systems such as bike lanes/multi-use trails, sidewalk, curb ramps and mid-block crossings
- Supervised staff, assigned work tasks, and monitored the workload of approximately 15 employees
- Set goals and expectations for traffic engineering administration staff productivity and monitored outcomes
- Organized, monitored, and provided for the training and professional development needs of traffic engineering administration staff
- Communicated with the Mayor and District Commissioners regarding neighborhood traffic issues and programs such as the Mayor's Transportation Initiative, traffic calming, safe and walkable communities, and accessibility to transit routes
- Attended community meetings or events during night or weekend hours as needed

### Florida Department of Transportation

- Reviewed and analyzed traffic signal designs, traffic signal warrant studies, stop sign warrant studies, traffic speed studies, delay studies, gap studies, crosswalk analyses, lane elimination, traffic signing and marking, and traffic calming
- Investigated, reviewed, commented, and prepared appropriate reports for FDOT initiatives for Traffic Impact Studies, Intersection Control Evaluations, Roadway Safety Audits, LED lighting conversion, Roundabouts, Express

## Humberto Castellero, PE, PTOE

Lanes, Lane Elimination, Complete Streets, Practical Design and FICE requirements for scopes and man-hour estimates for new initiatives.

- Developed innovative transportation procedures, guidelines and standards for inclusion in the Traffic Engineering Manual to complement the signs, pavement markings and signal guidelines in the MUTCD.
- Coordinated major policy, design criteria, standards, and specifications implementation as part Complete Streets, Intersection Control Evaluation (ICE), Safe Routes to School, School Zones, Speed Management and Traffic Regulation Procedures.
- Developed risk management assessment and Benefit-to-Cost ratios for implementation of key transportation initiatives including LED Lighting, Traffic Control Lane Closure Information System, Lane Departure initiatives, Express Lanes, Wrong Way Crashes and Complete Streets.
- Provided support related to computer software needs and application for the use of innovative technology for 3D Modeling and implementation, Highway Safety Manual and Complete Streets
- Coordinated revisions to the Florida Design Manual, Florida Green Book, Manual on Uniforms TS, TEM, Speed Zoning Manual, Florida Intersection Design Guidelines, Design Standards, and Production Support scopes and man-hour estimates.
- Developed programs designed to promote innovation, safety and efficiencies for a Multi-modal transportation system such as Complete Streets, Highway Safety Manual, intersection improvements, transit and bicycle and pedestrian corridors.
- Conducted training for Lighting, Roundabout, Manual Uniform Traffic Studies, Florida Green Book, Plans Preparation Manual and Highway Safety Manual.
- Worked as liaison with many CO staff including the Offices of Design, Construction, Maintenance, Traffic Operations, Program Management, Production Support, Federal Highway Administration, the Districts (DDE, DRDE, DCPME, DTOE), Florida Institute of Consulting Engineers (FICE), ITE, and FACERS to deliver cost effective and a timely transportation initiatives spearheaded by the FDOT.

### Eisman & Russo, Inc.

- Prepared engineering reports including preliminary engineering, safety studies, signal warrants, traffic impact studies, roadway widening, interchange modifications bicycle and pedestrian studies, transit facilities for FDOT, Jacksonville Transportation Authority, City of Jacksonville, Clay County, Baker County, Putnam County and Nassau County.
- Developed plans, specifications and estimates for major arterials widening including analysis of traffic signal warrants, review of crash history reports and collision diagrams, investigation of roadway alignment, geometry, design speeds, pedestrian generators such as school zones, and evaluation of signing and pavement markings to meet MUTCD, Plans Preparation Manual, Florida Greenbook and Design Standards.
- Developed project schedules, engineer's estimates and progress of projects to deliver projects on time and within budget.
- Reviewed and analyzed traffic signal designs, traffic signal warrant studies, stop sign warrant studies, traffic speed studies, no passing zone studies, parking studies, delay studies, gap studies, crosswalk analyses, lane elimination, traffic signing and marking, and traffic calming.
- Prepared bid packages, conducted pre-bid and preconstruction meetings on behalf of the local governments. Also, addressed all contractor's questions and revised addenda if necessary. Reviewed all bid packages and recommended award the responsible low bidder. Projects included roadway widening, intersection improvement, bicycle and multi-use facilities, pedestrian improvements, transit improvements, pedestrian bridges.

## Humberto Castillero, PE, PTOE

- Lead a team of six professional engineers, two planners, two designers, two technicians and one administrative staff for all transportation and land development projects.
- Hired, trained, supervised, and evaluated team performance and project coordination with all activities assigned to the Transportation Division.
- Implemented marketing plan and goals established for the Transportation Office regarding client satisfaction, project status, schedules and budget targets, and strategic development for new markets.
- Negotiated and executed all engineering contracts including developing scope of services, selection of engineering disciplines, and estimation of staff hours and preparation of project schedules.
- Monitored engineering contracts, subcontracts, change orders and other agreements with clients and sub-consultants. Managed billing process, collection of client billings and other operational and financial matters.
- Provided post design services to local agencies and FDOT for major transportation and signal improvement projects during construction phases. Attended progress meetings; answered contractor's request for information, determine validity of extra work and approved contract change orders. Reviewed project reports and schedules to ensure timely completion of projects.
- Maintained close liaison with clients to resolve all project questions, such as design requirements, completion requirements, extra work, billings and future work. Worked effectively with city staff, council offices, residents, and businesses.

### England, Thims & Miller, Inc.

- Developed plans, specifications and estimates for major arterials widening including analysis of traffic signal warrants, review of crash history reports and collision diagrams, investigation of roadway alignment, geometry, design speeds, pedestrian generators such as school zones, and evaluation of signing and pavement markings to meet MUTCD, Plans Preparation Manual, Florida Greenbook and Design Standards.
- Prepared engineering reports including preliminary engineering, safety studies, signal warrants, traffic impact studies, roadway widening, lighting interchange modifications bicycle and pedestrian studies, transit facilities for FDOT, Jacksonville Transportation Authority, City of Jacksonville
- Developed project schedules, engineer's estimates and progress of projects to deliver projects on time and within budget.
- Reviewed and analyzed traffic signal designs, traffic signal warrant studies, stop sign warrant studies, traffic speed studies, no passing zone studies, parking studies, delay studies, gap studies, crosswalk analyses, lane elimination, traffic signing and marking, and traffic calming.
- Prepared bid packages, conducted pre-bid and preconstruction meetings on behalf of the local governments. Also, addressed all contractor's questions and revised addenda if necessary. Reviewed all bid packages and recommended award the responsible low bidder. Projects included roadway widening, intersection improvement, bicycle and multi-use facilities, pedestrian improvements, transit improvements, pedestrian bridges.
- Provided post design services to local agencies and FDOT for major transportation and signal improvement projects during construction phases. Attended progress meetings; answered contractor's request for information, determine validity of extra work and approved contract completion of projects.
- Offered technical advice and assess risk management information during all phases of the project, from planning, to design, to construction and finally to project acceptance.
- Maintained close liaison with clients to resolve all project questions, such as design requirements, completion requirements, extra work, billings and future work. Worked effectively with city staff, council offices, residents, and businesses.

## Humberto Castillero, PE, PTOE

- Negotiated and executed all engineering contracts including developing scope of services, selection of engineering disciplines, and estimation of staff hours and preparation of project schedules.
- Monitored engineering contracts, subcontracts, change orders and other agreements with clients and sub-consultants. Managed billing process, and collection of client billings.

### City of Oakland

- Prepared engineering reports including preliminary engineering, safety studies, signal warrants, stop sign warrants, travel time and delay studies, traffic impact studies, roadway widening, interchange modifications bicycle and pedestrian studies, lane elimination, and transit facilities for the City of Oakland.
- Prepared bid packages, conducted pre-bid and preconstruction meetings on behalf of the local governments. Also, addressed all contractor's questions and revised addenda if necessary. Reviewed all bid packages and recommended award the responsible low bidder.
- Managed CIP projects including roadway widening, intersection improvement, bicycle and multi-use facilities, pedestrian improvements, ITS, signal coordination, Transportation Management Center, parking lots and garage upgrades, transit improvements, and context sensitive projects.
- Developed plans, specifications and estimates for major arterial widening including analysis of traffic signal warrants, review of crash history reports and collision diagrams, investigation of roadway alignment, geometry, design speeds, pedestrian generators such as school zones, and evaluation of signing and pavement markings to meet MUTCD, Oakland and Caltrans Design Standards.
- Reviewed and approved Traffic Impact Studies for concurrency with the Land Development Office.
- Developed project schedules, engineer's estimates and progress of projects to deliver projects on time and within budget.
- Identified and applied for Federal and State grants to leverage transportation improvement expenditures for studies and capital improvements projects.
- Hired, trained, supervised, and evaluated team performance and project coordination with all activities assigned to the Transportation Division.
- Prepared annual budgets and allocate funding to projects.
- Worked effectively with city staff, council offices, residents, and businesses.
- Counseled and appraised subordinates concerning their work, progress, and company policies.
- Managed all the parking garage facilities and parking lots owned by the City.

### City of San Leandro

- Supervised major transportation projects and programs.
- Managed Capital Improvement Plan (CIP) projects for Roadway, Pedestrian, Bicycle, Transit, Signals, TMC and ITS improvements.
- Developed plans, specifications and estimates for major arterial widening including analysis of traffic signal warrants, review of crash history reports and collision diagrams, investigation of roadway alignment, geometry, design speeds, pedestrian generators such as school zones, and evaluation of signing and pavement markings to meet MUTCD
- Prepared bid packages, conducted pre-bid and preconstruction meetings on behalf of the local governments. Also, addressed all contractor's questions and revised addenda if necessary.

# Humberto Castellero, PE, PTOE

- Supervised the preparation and review of feasibility studies, environmental impact reports, traffic impact analysis, and ITS implementation.
- Identified and applied for Federal and State grants to leverage transportation improvement expenditures for studies and capital improvements projects.
- Prepared annual budgets and allocate funding to projects.
- Worked effectively with city staff, council offices, residents, and businesses.
- Counseled and appraised subordinates concerning their work, progress, and competency.

## Certifications & Training

ITS Systems Certificate (CITE)	FELI Graduate – Class 2012	Roadway Safety Audit – NHI
FDOT Adv. Work Zone Traffic Control	FDOT Excellence/ Quality in PM	FDOT Specification Package
FDOT LRE Training	FDOT Bases of Estimates Training	FDOT Plans Preparation Manual
FDOT PD&E Manual Training	IPMP Bleikert Citizen Participation	CALTRANS Value Engineering
FDOT Negotiation Skills	FDOT Roadway Design	FDOT Road Lighting Design

## Skills

Communication: Toast Master – Competent Communicator & Competent Leader

Leadership: Dale Carnegie Certificate – How to win friends and influence people

Language: Fluent in both English and Spanish